ASTP (USA) MC272/1

Time: 09:43 CDT, 74:23 GET

7/18/75

CMP - this is called stchi a very common and delicious soup. Incidentally, the foods over there in the Soviet Union are somewhat similar to ours; naturally some dishes that are different, general - I like things like their ice cream bread, shish-ka-bob, things like that. Here on the table, Valeriy seems to like his stchi very well; I think some of the best space foods are these canned meats like we have here, chicken with eggs, chicken also tuna; various fishes are very good.

CC-H Apollo, Houston. On 181, we would like command module 1 and 2 TV powers OFF, but we'd like them on again before the VTR

coverage of the transfer back.

CMP Okay. We have napkins - - SCDR (Valeriy, how do you read me?)

SFE (Weak.)

SCDR Valeriy, how do you read me?

SFE (I read you very weak.)

SCDR (Valeriy, I have no comm with Moscow at all. I just changed my headphones and I'm now speaking from Deke's place. I did not do my TV coverage of space food. The way I understood you is not to do the TV seance from the docking module, 1.

SFE (2. When you come in here take with you - take 3 cartridges with you. Did you understand?)

SCDR (Roger. Over.)

CMP Okay. So anyway, Bo. We're about to start eating, and we'll eat with knives and forks and spoons just the way you would down on the Earth; most of the food will stick to the spoon well enough and things that won't of course, will be eaten out of the tubes or, like the bread will be eaten in bite-sized bits. All in all, it's a very convenient setup up here. With that unless you have any questions, I think we'll press on and eat.

CC-H Roger. Thank you, Vance.

ACDR Okay, Bo. If you're looking on TV, you see

Alexey eating some soup, in fact it's potato soup.

CC-H Roger. We've got a picture of Alexey eating there.

ACDR How's the soup, Alexey?

CC-H Apollo, Houston. We're going to finish our TV here and we would like you to go down to panel 181 and turn the 3 TV power switches OFF.

ACDR All righty. You want it OFF now, right?

CC-H Roger. But we would like them back on before the VTR coverage of the transfer.

ACDR Okay. When will that take place? Is that in the

flight plan?

CC-H That's about 74:55. ACDR Roger. 74:55, Bo.

SCDR Houston, this is Soyuz commander. How do you read me? Hey, Bob. How do you read me?

CC-H (I read you well.)

ASTP (USA) MC272/2

Time: 09:43 CDT, 74:23 GET

7/18/75

SCDR Okay. Houston, just now - Right now Tom, Deke and me are in the Apollo spacecraft. We fill with lunch; it is a good lunch. I like it very much, but it is mostly the same. The best part of a good lunch is not what you eat, but with whom you eat. Just now I eat my space food with my very good and very nice old friends, Tom and Deke. Before I have beautiful dinner on Apollo spacecraft - in Apollo spacecraft. I have potato soup, strawberry and steak, bread and a cold tea. I like it very much.

CC-H (Very good. I read you very clearly.)

ACDR Did you get that on the tube?

CC-H Negative. Unfortunately, we didn't see that on TV, but we did understand it quite clearly.

ACDR Okay. Good.

CC-H Apollo, Houston. We think that the earlier problem with the communication may have been that the Soyuz was not properly configured for the transmission of Leonov's voice down here.

ACDR Okay.

CC-H Apollo, Houston. We think that it may have been in the mode that they talked over Madrid.

ACDR Roger.

CC-H Apollo, Houston. There are 2 minutes until ATS LOS. We'll have you out Wallops at 74:40.

ACDR Okay. And I'll get those TV cameras OFF, Bo.

CC-H Thank you.

ACDR Right now Alexey is finishing his desert eating

strawberries.

CC-H Understand.

PAO This is Apollo Control. Loss of signal through the ATS-6 satellite - -

ASTP (USA) MC273/1

Time: 09:53 CDT, 74:33 GET

7/18/75

PAO This is Apollo Control. Loss of signal through the ATS-6 satellite. Apollo and Soyuz spacecraft crossing the Indonesian Republic - the islands in the Republic of Indonesia, in the western Pacific. Next station in approximately 6 minutes - Orroral Valley. However, it appears that Orroral Valley will not be called up - that it's a rather low elevation angle pass to the northeast of that station, and there is a range of mountains between the station and the ground track of Soyuz and Apollo. AOS next revolution, on the Santiago, Chile tracking station. And ATS-6 is 35 minutes away. If, per chance, there are any communications through Orroral Valley, we will play those back on a delayed basis. This is Apollo Control, 74:34 ground elapsed time.

ASTP (USA) MC274/1

Time: 10:29 CDT, 75:09 GET

7/18/75

CC-H Apollo commander, did you copy that?
ACDR I got it. Already got it marked out.

CC-H Okay. The only thing is that you do have to stand by for their AOS.

ACDR Okay, Bo.

PAO This is Apollo Control. At an early acquisition signal through Santiago, missed a few seconds perhaps from the first call and response and we're some 5 and a half minutes away from acquisition through ATS-6 satellite. We have a minute and 30 seconds on the stored on the recorder which we'll play back now from Santiago during this gap until we pick up ATS-6. Roll the tape.

CC-H Apollo, Houston through Wallops for approximately 10 minutes.

ACDR Roger. Through Wallops.

CC-H Apollo, Houston. There is approximately 1 minute until LOS. The next AOS is Santiago at 75:10.

CC-H Apollo, Houston through Santiago on a short pass; ATS is at 75:17.

ACDR Roger. Hey Bo, this is Tom.

CC-H Go ahead, sir.

ACDR Okay. I'm in the docking module working on step 2 of the third transfer. Do you want us to go up here and go through this - checklist as far as removing these samples.

CC-H Roger. We'd like you to do everything as in the checklist nominally.

ACDR Okay. The temperature is 28 degrees and the furnace cool light's on so we can go do it.

CC-H Roger. And I have one deletion for you. Step 11 on D4-8 you can eliminate all those references to TV 11-1.

PAO This is Apollo Control. That completes playback of Santiago, Chili pass. Three and a half minutes now away from acquisition through the satellite and we're standing by.

CC-H Apollo, Houston through ATS. How do you read?

ACDR 5 by.

CC-H And Apollo, we would like the three TV power switches on panel 181 turned on.

ACDR I think they're all on Bo.

CC-H Understand.

```
7/18/75
                    Apollo, Soyuz. How do you read me?
     SFE
                    I think step 3.
     ACDR
                    Apollo, Soyuz. How do you read me?
     SFE
                    (I hear you excellently. Stand by.)
     ACDR
                    What step are you doing now?
     SFE
     ACDR
                    (Step 2.)
                    Apollo, Houston. Over.
     CC-H
                    Go ahead, Bo.
     ACDR
                    I'm - I'd like to check and see if the transfer
     CC-H
time was started on schedule.
                    See, how it was - we started the transfer time on
     ACDR
schedule. We had to go back and pick up the furnace sample and
sign in a couple of books and things.
                    Roger. I understand.
     CC-H
     ACDR
                    Okay?
                    Roger. We're coming up on 14 minutes transfer time.
     CC-H
     CC-H
                    (Garble.)
                    But we'll be making it up.
     ACDR
     CC-H
                    Roger.
                    Okay. Hatch 2's closed.
     ACDR
                    (Hatch 2's closed. (Garble.))
     ACDR
                    (Valeriy. Now I'm working on step 7 in the docking
     ACDR
module.)
     SFE
                    Soyuz tunnel 2 pressure equalization.
                    All done, Bo. Are you reading okay?
     DMP
                    Roger, Deke. We read you all right.
     CC-H
                    Okay. Yeah, I got mixed up. Our (garble) says
     DMP
(garble).
                    (Soyuz, this is Apollo. I am now beginning
     ACDR
pressurization.)
                    Roger. Understand.
     USSR
                    Okay, Bo. We're pressurizing the DM.
     ACDR
                    Roger. Copy.
     CC-H
                    (Soyuz, this is Apollo. Pressure in the docking
     ACDR
module up to 490 millimeters.)
```

ASTP (USA) MC275/1

END OF TAPE

Time: 10:39 CDT, 75:19 GET

```
Time: 10:49 CDT, 75:29 GET
7/18/75
                    Bo. this is Tom. How do you read?
     ACDR
     CC-H
                    We read you all right, but we've lost our TV
picture.
                    Yeah, I noticed. The monitors were jumping around
     ACDR
in here in both the cameras here in the DM.
     CC-H
                    Roger.
                    I mean the image in the monitor is jumping around.
     ACDR
     CC-H
                    Docking module, Houston. Over.
     DMP
                    Go ahead. Bo.
                    Hatch 2 has been doing well today and with your
     CC-H
concurrence, we suggest you eliminate or cut short the hatch 2 pressure
integrity check.
                    Sounds great. Now we can press on.
     DMP
    DMP
                    (Soyuz, this is Apollo. Step 8's completed. How's
your step 9?
             Over.)
     CC-H
                    Apollo, Houston. Could you tell us which camera
you have in master, please?
                    Did you call me, Bo?
     ACDR
     CC-H
                    Roger.
     CC-H
                    Apollo, Hous - -
     ACDR
                    (Garble) you have an echo.
     CC-H
                    Apollo, Houston. Could you tell us which camera's
in master at this time?
                    You got a horrible echo, are you calling the
command module or the docking module?
                    Docking module, which camera is in master at this
     CC-H
time?
                    The - the Soyuz is in master, Bo.
     DMP
                    Roger. Thank you.
     CC-H
                    Hey, Bo. Per checklist the one in the command
     ACDR
module's also in master. I guess they can't all be right.
                    Hey, Bo. command module. How do you read?
     ACDR
     CC-H
                    Command module. We would like the command module
camera into slave.
     ACDR
                    Roger. Command module's in slave.
                    Okay, Vance. We're ready for you to open hatch 4,
     ACDR
number - step number 9.
                    (Garble.)
     SPKR
                    How you doing there, Vance?
     ACDR
                    Apollo, Soyuz. (Garble) in step number 9.
     USSR
                    (Roger. Understood.)
     ACDR
     SPKR
                    (Garble.)
                    Okay. (Pressure equalization between the docking
     ACDR
module and the Soyuz now.)
                    Apollo, Soyuz. Hatch number 4, opened.
     USSR
                    (Roger. Understood you.)
     ACDR
     ACDR
                    (Step 10 complete.)
     USSR
                    Roger.
     ACDR
                    (I will open hatch 3 when you are ready.)
```

ASTP (USA) MC276/1

```
ASTP (USA) MC276/2
Time: 10:49 CDT, 75:29 GET
7/18/75
```

USSR	We must await AOS.
SFE	(This is Soyuz 2.)
USA	(I read you well.)
SFE	(Moscow this is Soyuz 2. How's the picture?)

```
ASTP (USA) MC277/1
Time: 10:59 CDT, 75:39 GET
7/18/75
                    (Moscow, this is Soyuz 2. How is the picture?)
     SFE
     USA
                    I'm just standing by here, Vance, waiting.
                    (Russian)
     USSR
     USA
                    (How is it now?)
                    Yeah, we were just talking about (garble).
     USA
     USSR
                    (What did you want to say to him?
     USA
                    I'm showing Alexey all the fish we have in the docking
module.
     SPKR
                    (Garble)
                    (Apollo is readv.)
     USA
     USA
                    (Ready to open hatch 3?)
                    (Hatch 3 is open.)
     USSR
                    (Russian)
     USA
     USA
                    (Garble)
     USA
                    (Valeriy, do you need any nitrogen?)
     DMP
                    Houston, how do you read? Docking module.
     CC-H
                    Docking module, read you loud and clear.
     DMP
                    Okay. Up to step 13 now. Looks like we're
back on schedule and appreciate the help on the rapid check
on hatch 2.
     CC-H
                    Roger. I understand. Step 13 on schedule.
     DMP
                    Pardon me now. It was step 15. I couldn't read
             It's - Ive already gone through 13. We're up to step 15.
this thing.
     CC-H
                    Roger.
     USA
                    (All right.)
     USA
                    And they don't need any nitrogen.
     USA
                    Understand. No nitrogen required.
     DMP
                    Hello Houston, docking module.
     CC-H
                    Docking module, Houston. Go ahead.
     DMP
                    Everything is going smooth here. Is Lenny(?) around there?
     CC-H
                    Roger. He's listening.
                    Okay. You might (garble) I just happened to check the
roll index and than we put on, you know, between the command module and docking
module.
     CC-H
     DMP
                    It's about as close as you get it to zero. Maybe it's less
than a 20th to a 50th of a degree off.
                    Was it better than Apollo 10, is his question?
     DMP
                    Yeah. In other words, the zero line is just darn near
splitting the other index line.
                    Roger. He copied.
     CC-H
     USA
                    Laughter.
```

ASTP (USA) MC278/1

Time: 11:09 CDT, 75:49 GET

7/18/75

USSR (Garble)

USSR (COMM check at 19:24.)

ACDR Houston, Apollo. How do you read me over in the

orbital module?

CC-H Apollo commander read you 5 by in the orbital module.

ACDR Roger Bo. Read you 5 by. All connected up in the

COMM over here in the OM.

CC-H Understand.

SFE Deke, how do you read me?

DMP (Russian) Valeriy.

USSR (This is Soyuz. How do you read? Over.)

CC-H Command module, Houston.

DMP Go ahead, Bo.

USA Turn up the microphone (garble).

CC-H We would like the CM1 and CM2 power off on panel 181.

ACDR Okay. CML and 2 coming off.

```
ASTP (USA) MC279/1
Time: 11:19 CDT, 75:59 GET
7/18/75
     SPKR
                   (Over.)
     SFE
                   Vance, how do you read me?
                   (I read you excellently. Valeriy, how do you hear
     CMP
me?)
                   (Valeriy, how do you read me? I don't read you now.)
     CMP
                   Houston, Apollo.
     ACDR
                   Apollo, go ahead.
     CC-H
                   Okay, Bo. Sounds like Valeriy's having the same
     ACDR
trouble Alexey had this morning. He can read everybody, but he can't
transmit. But Vance and him are going to press right on and do the
transfer.
                   Roger, Tom. We'd like to get the voice checks here
     CC-H
before you close the hatch in case we are going to change out a headset.
                   Roger. Will do.
                   And, Tom. Just for a check, would you give us a short
     CC-H
count?
                   Roger. 1, 2, 3, 4, 5, did you read that?)
     ACDR
     SFE
                   (We heard you right.)
                   (Thank you.)
     ACDR
                   Houston, this is Soyuz commander. How do you read
     SCDR
me?
     ACDR
                   (I read you loud and clear.)
                   I give you voice comm; 1, 2, 3, 4, 5.
                                                          5, 4, 3, 2, 1.
     SCDR
                   (Thank you (Russian) loud and clear.)
     ACDR
                   How do you read me?
     SCDR
                   (Loud and clear. How me?)
     CC-H
                   I read you loud and clear, Tom.
     SCDR
                   Okay. I'll check with Moscow. (Moscow, how do you
     ACDR
read me. This is Apollo commander.)
                   Houston, this is Tom. In the flight plan, do you
     ACDR
want us the check with Moscow, too? Over.
                   That's right. I heard you call, but I didn't hear
     CC-H
Moscow answer.
                   (Moscow, Moscow. How do you read me?)
     ACDR
                   (Moscow, this is Houston. How do you read? Over.)
     CC-H
                   (Moscow, Moscow, this is Apollo. How do you read
     ACDR
now?)
                   Bo, I don't get them anyplace. Maybe we're configured
     ACDR
wrong back on the command module, I don't know.
                   Negative. We're not reading Moscow either.
     CC-H
     ACDR
                   Okay.
                   We're checking the ground right now.
     CC-H
                   (Moscow, Moscow. This is Apollo. How do you read? Over.)
     ACDR
```

ASTP (USA) MC279/2

Time: 11:19 CDT, 75:59 GET

7/18/75

USSR (Russian)

CC-M (Valeriy, Soyuz 2. I hear you well.)

CC-M (Soyuz, this is Ilja Laurov(?). On 19 you have - you're using the hand button and also try to - Moscow, can't hear Tom. Turn on the mike power on the control panel if it's not turned on. And also take your hand control because Moscow at home can't hear Tom.)

SFE (Roger. Turn on mike power; mike power's turned on.

Is there a light aboard - intercomm on.)

CC-M (Moscow should be hearing you. Let Tom ask - try to get in touch with Moscow again.)

ACDR (Moscow, Moscow, this is Apollo. How do you read

me?)

CC-M Apollo, this is Moscow. Read you loud and clear.

How me?

```
7/18/75
                  (Moscow, Moscow, this is Apollo. How do you read
     ACDR
me?)
                  Apollo, this is Moscow. Read you real loud and
    CC-M
clear. How me? Over.
                  Roger. (Yes, I hear you excellently.)
    ACDR
                   (Moscow, this is Houston. How do you read me?)
     CC-H
                  Loud and clear. How me?
     CC-M
                   (All right. Our tests have been completed. You
     CC-M
can start your tests.) Leonov, this is Moscow. How do you read?
                  Roger. Hatch 4 is closed.
     SCDR
     CC-M
                  (Garble)
                  Soyuz, (Russian) Soyuz (Russian) This is Moscow.
     CC-M
How do you read?
                  Moscow, this is Soyuz. I hear you loud and clear.
     SCDR
                  Roger. (I also read you well.)
     CC-M
                  Okay.
     SCDR
                  Hello, Bob. How is it going?
     ACDR
                  Quite a show, Tom. Quite a show.
     USA
     CC-H
                   (All right. Good, Tom, good.)
                  Deke, docking module, docking module pilot. This is
     CC-M
Moscow. How do you read?
                  (I read you excellently. How do you hear?)
     DMP
                   (Deke, I also hear you well. Soyuz 2, Moscow. How
     CC-M
do you read? Over. Soyuz 2, this is Moscow. How do you read? Over.
                   (Alexey, are you ready to dump pressure in tunnel 2?)
     USA
                  Apollo, Houston. There is less than a minute until
LOS. AOS will be at Orroral at 76:13 which is in about 2 minutes.
                  Okay. (Roger. I understood you.)
     USA
                  Deke, hatch number 4 is closed. Ready for tunnel 2
     SCDR
depressurization.
                   (Soyuz, this is Moscow. Soyuz, this is Moscow.)
     CC-M
                   (Standing by Moscow. Hear you excellently. Second
     SCDR
comm check with Houston M-CC and the USSR specialist group at 20:18
Moscow time. How did you receive? Over.
                   (Soyuz, this is Moscow. How did you receive? Over.
Soyuz, Soyuz, this is Moscow. How did you read second comm check at
20:18?
                   We received.
     SCDR
                   Soyuz 1, we hear you normally. Second comm check
     CC-M
at 20:18. Over. (I've already given you the readback many times.
Second time check 20:19. Over.)
                   (Well, you just now come through to us. Before
     CC-M
that we couldn't hear you.
                   (Did you hear Soyuz 2?)
     SCDR
     CC-M
                   (No, Soyuz, we did not.)
                   (Alexey, I am initiating integrity check of hatches
     ACDR
3 and 4.)
                   (Moscow, this is Soyuz. How do you read me?
     SCDR
                   (Soyuz, this is Moscow. Excellently. How do you
     CC-M
read me? Over.)
                   (You didn't hear Soyuz 2?)
     SCDR
                   (Not - negative. We did not hear him. But there
     CC-M
```

won't be any comm there because now I have no communication with that

ASTP (USA) MC280/1

Time: 11:29 CDT, 76:09 GET

ASTP (USA) MC280/2

Time: 11:29 CDT, 76:09 GET

7/18/75

point. Roger. I couldn't handle the TV coverage. For some reason it couldn't work there. Roger.)

USSR (Right now, Soyuz 2 is asking for you. Do you hear him? You don't hear him?)

CC-M (No, we don't. But if you are getting the signal Soyuz, then the idea is should it come here too. I hear him very weakly. Very weak. Roger. Soyuz, this is Moscow. There's a request for you. Don't forget after you finish work to finish - to turn OFF the VHF AM whenever necessary.)

SCDR (Roger. I heard it.)

CC-H Apollo, Houston. There are just a few seconds until LOS. We'll see you at Quito at 76:44.

ACDR Roger. 76:44. Thank you.

ASTP (USA) MC281/1

Time: 11:39 CDT, 76:19 GET

7/18/75

PAO This is Apollo Control. Loss of signal through Orroral Valley tracking station. 24 minutes until reacquisition at Quito, as the fourth transfer continues - third transfer, I beg your pardon. For those who keep statistics on times, we have copied the following times of - up to the point of LOS on the events in the transfer number 3. Hatch 2 closed at 75:25. Docking module pressurization began at 75:28. Hatch 4 opened at 75:37. Hatch 3 opened at 75:41. The Soyuz commander and Apollo commander moved into Soyuz somewhere around 75:47. The command module pilot, Vance Brand, moved from the Soyuz orbital module about 4 minutes earlier, at 75:43. Last move by a crewmen was made by the flight engineer, Valeriy Kubasov, at 75:49, as he transferred into the docking module. Hatch number 4 was reclosed at 76:09. We have no confirmation yet on depressurizing the docking module down to the Apollo atmospheric pressure of 5 pounds. And, last data shown on the EECOM's display at LOS Orroral Valley still shows the docking module pressure at slightly over 10 pounds per square inch, or 520 millimeters of mercury. We'll return in 22 minutes at Quito, Ecuador. During this upcoming revolution, during transfer 3, is scheduled the in-flight press conference, joint press conference, in which questions from correspondents covering ASTP in Moscow and in Houston will be read up to the crews by the CAP COMMs in both control centers. At 76:22 ground elapsed time, this is Apollo Control.

ASTP (USA) MC282/1

Time: 12:03 CDT, 76:43 GET

7/18/75

PAO This is Apollo Control. 76:43 ground elapsed time. 40 seconds away from acquisition through Quito, Ecuador, and the ATS-6 satellite. Upcoming in this orbit will be the in-flight joint press conference. Questions that have been submitted by newsmen and covering the ASTP mission in Houston and in Moscow, will be read up to the crew members over a half hour period. The questions in English from the Houston side will be read up by spacecraft communicator, Karol (Bo) Bobko. Those in Russian for the Soviet crewmen will be read up by one of the visiting team of Soviet specialists, Valeriy Elariyono. At the other side, Bob Overmyer on the US visiting team at the Moscow Control Center will read up questions to the Apollo crew from the correspondents in Moscow. We have acquisition at Quito for the next 5 minutes.

CC-H Apollo-Soyuz. Apollo, Houston, through Houston.

ACDR Roger, Bo. Reading you loud and clear.

CC-H Roger. This is the Quito pass. I know you may not have been able to bring the note over from Apollo, do you need any help?

ACDR (Russian)

ACDR You want us to go ahead?

CC-H Roger. You can go.

ACDR Roger. This is the Apollo, Soyuz crew. We want to say hello to the people in Ecuador and also particularly to the president Rodreiquez. Also, to the American and Soviet Ambassador, who are at the site. We want to thank you so much for the wondeful help and support that you have given the Apollo, Soyuz Test Project. We've looked down upon your wonderful country, your beautiful country, many times and we hope that some day we have the opportunity to visit there.

CC-H Command module, Houston. When someone has the chance, on panel 181, we would like the CM camera TV power ON, CM camera 2 TV power ON.

SCDR Right now, Tom Stafford and me in orbital module of the Soyuz spacecraft. We are aboard on Soyuz-Apollo spacecraft. We are sending our best wishes to the people of Ecuador. Thank you very much for you attention.

ACDR Deke, you want to hello there?

ACDR Hello Houston, Apollo.

CC-H Apollo, Houston. Go ahead.

ACDR Roger. Did the voice relays get through?

CC-H We heard your greeting and Alexey's also, and we heard them loud and clear.

ACDR All right.

CC-H Command Module, Houston.

CMP Go ahead, Bo.

CC-H Command module, when someone has the chance, we

would like, on panel 181, CM camera number 2, TV power to ON.

CMP Yeah, I got your message on that, but I've still got to get the camera connected.

CC-H Okay, and - has Valeriy's comm been good?

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ASTP (USA) MC282/2
```

Time: 12:03 CDT, 76:43 GET

No.

7/18/75

CMP Yeah. Seems to be. CC-H Fine, thank you. CC-H Apollo, Houston. Less than a minute until LOS, Bermuda, at 76:52. Command module pilot, Houston. How was the check of CC-H tunnel 2? CC-H Apollo, Houston through Bermuda and then ATS. Standing by. ACDR Okay, Bo. We have the power on down there now on 181 (garble). Valeriy do you read me? USSR (Okay, I read you well.) USSR Well? USSR USSR Very well. SCDR You want to drink some juice, Valeriy? Yes. SFE What about beer? SCDR

END OF TAPE

SFE

```
ASTP (USA) MC283/1
Time: 12:13 CDT, 76:53 GET
7/18/75
                    Do you want to drink some juice, Valeriy.
     SCDR
                    Yes.
     SFE
                    What about beer?
     SCDR
                    Oh.
     SFE
                    Are you still with us Bo?
     ACDR
                    Roger. Still here.
     CC-H
                    Okay. Did you hear Valeriy that time.
     ACDR
                    Roger. As soon as we get ATS coverage we'll start
     CC-H
the COMM check with the Soyuz and we'd appreciate it if you'd give us
a call when you in the Apollo are ready for the COMM checks as well.
     ACDR
                    Okay.
                    And command module pilot, Houston?
     CC-H
                    He's not (garble) yet, (garble).
     DMP
     CC-H
                    Roger.
                    Bo, the DP.
     DMP
                    Apollo, Houston. If you were calling, you were brok-
     CC-H
en up. Please say again.
                    Okay. Vance is ready to start (garble).
     DMP
                    We still not - (garble) read them Apollo.
     CC-H
     DMP
                    Roger, Bo.
                    Houston, how do you read the orbital module. Over.
     ACDR
                    We read you with an echo Tom, how do you read us?
     CC-H
                    I read you loud with an echo. Over.
     ACDR
                    Command module, Houston. On panel 10 we would like
     CC-H
you to turn the phone mike interconnect switch off.
                    Okay, it's off.
                    Apollo commander in Soyuz, Houston. How do you now
     CC-H
read?
                    I still read you with an echo now, Bo. However I
didn't hear myself. Give me a short check.
                    1, 2, 3, 4, 5, Houston out.
     CC-H
     ACDR
                    You still have the echo.
     CC-H
                    We're reading you much better.
                    Command module, Houston. Could we have you check
     CC-H
the S-band thumbwheels on panel 10 to full decrease.
                    Full decrease.
     DMP
                    Apollo commander in Soyuz, how do you read Houston
     CC-H
now?
                    Roger. Read you loud and clear with no echo.
     ACDR
     CC-H
                    Roger.
                     (Soyuz, this is Valeriy Leonov. How do you read?)
     SCDR
                     (Soyuz, this is Valeriy Leonov. I don't hear you.
     SCDR
you read me?)
                     (Valeriy, this is Soyuz. I read you excellently.)
     USA
                     (Same here your picture hand was very - very suc-
     SCDR
cessful here.)
                     (This is Soyuz 2. How do you read, over.)
     SFE
                     (Soyuz 2 this is Valeriy Leonov I hear you excellently.
     SCDR
Give me a count.)
                    This one picture together with Valeriy Leonov from
     SCDR
for mission - like this - -
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                    Houston, Houston.
     SFE
                    Apollo spacecraft, Tom Stafford, sit down - -
     SCDR
                    (Giving a countdown)
     SFE
                    - - in the docking module. Deke Slayton behind you.
     SCDR
     CC-H
                    Apollo commander, Houston.
                    How do you read the count?
                                                Over.
     SFE
                    Apollo commander, Houston.
     CC-H
                    (How do you read the count? Over.)
     USSR
     USSR
                    Vance Brand - -
                    Go ahead, Bo.
     ACDR
     CC-H
                    You seem to be on hot mike there.
                    We're on hot mike.
     ACDR
                    No, I'm sorry it was Alexey who was broadcasting.
     CC-H
                    Docking module pilot, Houston. How do you read
     CC-H
Houston?
     DMP
                    Roger. Read you 5 by, Bo.
     CC-H
                    We read you weakly. Could you move your mike so
that you may be speaking more directly into it sir?
                    That any better?
     DMP
                    That is better.
     CC-H
     DMP
                    Okay.
                    Command module pilot, Houston. How do you read?
     CC-H
                    I don't hear you transmitting.
     CMP
                    Command module pilot, Houston. How do you read?
     CC-H
     CMP
                    I read you - -
                    Well Vance, you came through well at the beginning
     CC-H
of your transmission, but then you cut out in the middle of the word.
                    He's reading you fine, Bo. How are you reading him now?
     ACDR
     CC-H
                    Roger. We read you, but we do not read Vance at all.
                    Okay. How do you read, Bo.
     CMP
                    That time we read you clearly. Could we have a short
     CC-H
count?
                    Rog. 1, 2, 3, 4, 5, 5, 4, 3, 2, ].
     CMP
     CC-H
                    Roger. Read you clearly.
                    (Soyuz, 2, this is Valeriy Leonov. How do you read me?)
     SFE
                    (Valeriy Leonov, I read you excellently.)
     SCDR
                    (We too.)
     SFE
                    (Roger. Excellent.)
     SCDR
                     (I've given you a count, did you read it?)
     SFE
                    (No - no we didn't, that's why we asked you again.
     SCDR
Give it to us again please.)
                    (This is Soyuz 2 giving a count. 1, 2, 3, 4, 5, 7,
8, 9, 10. How did you read over?)
                     (Excellent. Thank you.)
     SCDR
                    And command module, as soon as everybody's settled
     CC-H
there, we can get the camera focused and we'll be ready to allow
Moscow to do their checks.
                    Okay. Stand by one. We're still trying to get the
     ACDR
cables tied up here.
     CC-H
                    Roger.
```

(Soyuz, Soyuz. This is Moscow.)

CC-M

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(Soyuz, Soyuz. This is Moscow.)
     CC-M
     CC-M
                    (Soyuz, this is Moscow. How do you read? Over.)
     CC-M
                    (Soyuz, Soyuz. This is Moscow, for COMM. Over.)
     SCDR
                    (Moscow, this is Soyuz. I hear you excellently.
How do you read me?)
     CC-M
                    (Excellent. Before this, you didn't hear?)
     SCDR
                    (Negative.)
     CC-M
                    (Roger.)
                    (Soyuz 2, this is Moscow. How do you read?)
     CC-M
     SFE
                    (Moscow, this is Soyuz 2. I hear you well. How
do you hear me? Over.)
     CC-M
                    (Excellent. I hear you excellently.)
     MCC-M
                    (Apollo Commander, this is Moscow. How do you
read?)
     ACDR
                    Roger, Bob. Read you loud and clear. How me?
                    Roger, Tom. Read you loud and clear. Command
     MCC-M
Module Pilot, this is Moscow. How do you read?
                    Loud and clear, Bob. How do you read?
     CMP
                    Roger, Vance. Loud and clear. Docking Module
Pilot, this is Moscow. How do you read me - Deke?
     DMP
                    Yeah. I read you 5 by 5, Bob.
     MCC-M
                    Roger, Deke. Read you loud and clear. Good comm
checks, all 3.
                    Okay. Okay, Bo. We've had good comm check with
Moscow. And we're ready for one with you guys, I guess.
                   Roger. We still have a few minutes left until
conference, and we would just like to get this TV adjusted at this
time.
     ACDR
                    Okay. Tell me what you want with it. I've got
it sitting where I thought it was supposed to be.
                    Roger. We just lost it on the (garble) Hold on one,
     CC-H
please.
     CC-H
                    Deke, we'd ask you to take those cue cards down.
They cause the picture to bloom.
     DMP
                    Copy.
                    (Soyuz 1, this is Moscow, for COMM. Would you
     CC-M
copy, please? To do TV 11.3, at the 54th orbit. To switch on - -
                   (Would you say again, please? You were interrupted.)
     USSR
     CC-M
                    (In order to 11.3 - TV 11.3, at the 54th orbit, turn
                And at 347 - US 347/13 and cable 347/10.)
on TK camera 1.
                    (Unclear. Please repeat.)
     USSR
                    (347-10-1) and US 347-10.
     CC-M
     ACDR
                    What do you got there now, Bo?
     CC-M
                    (Connect those cables together.)
                    (Please don't hurry. We have - we have a big
     USSR
conversation. I couldn't get the numbers down. So don't hurry.)
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CC-M (All right. Later.)
USSR (Connect TK-1 camera.)
ACDR Just a little more.
USSR (US 347-10-1 to US 347-10.)
USA (Garble), Bo.
CC-H (Garble.)

USSR

CC-M (Roger. You copied correctly.)
USA Okay.

CC-M (After this comm session.)
CC-H That looks pretty good. J

(Russian)

CC-H That looks pretty good. Just a second, while you let the camera settle.

DMP We're getting all that extraneous communication from other places here, too, right now.

CC-H Apollo, Houston. There is a bright spot on your right. If there is a window, we'd appreciate the shade on it.

CC-H And, Deke, while you're close here to the camera, we'd like it to be zoomed in just a bit more.

DMP Getting a lot of echo there, Bo. Could you give me that last one again?

CC-H Roger. While you are in that position, we would like to - you to zoom in a bit more.

CC-H Just a little more, if you can.

CC-H That looks good, Deke.

DMP Okay. And, when you get unsnarled up there, we'll

be in great shape.

CC-H (Moscow, this is Houston. Our check is completed. Everything's okay.)

CC-M Roger, Houston. I read you loud and clear.

MCC-M Apollo Commander in Soyuz - We're going to start our press conference now. And we would like to ask you, sir, to begin with a statement, if you would.

ACDR Thank you, Houston. Say a couple of words, here. It's been most rewarding, 2 days, here in space, working with the Apollo-Soyuz Project. The success of the mission that both the United States, the Soviet Union, and the rest of the world have seen, is the results of the determination, the cooperation, and the efforts by the governments of the two countries, by the managers, engineers, and all the workers involved. It's been a very rewarding experience. Yesterday, when I first opened the hatch and said hello to Valeriy and Alexey, I had a couple of thoughts. However, due to communications, we could not - talk them directly. The thoughts were that when we opened this hatch in space, we were opening back on the Earth a new era in the history of man. I would have said (Russian). How this new era will go depends on the determination, the commitments, and the faith of both the peoples of both countries and of the world. I'm sure that it will work out in

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the future for good. Again, it's been a real pleasure to be on a mission and work with the cosmonauts. I'll turn it over to Alexey.

SCDR Okay. The representatives of two countries, are conducting the joint Soviet-American flight, because our peoples and our governments want to work together in spirit of cooperation, because a lot of experts in America and in the Soviet Union did a great job to make this flight possible. This work became possible in the climate of detente and a developing (garble) between our countries. This is why it is an important step on endless road of space exploration by joint effort of all mankind.

ACDR Okay, Bo. We're back to you.

MCC-H Roger. It's Moscow's turn to ask the questions that have been proposed by the press there.

MCC-M Thank you, Bo. ((Garble.) First question to the Soyuz Flight Engineer, Kubasov. You were the first welder in space. Do you foresee the establishment of a permanent orbital station, through the efforts of all interested countries, based on the principle of equal benefit for all nations?)

SFE (Do you have a picture, Moscow? This is Soyuz 2.)

MCC-M (Yes, we do. It's a good picture.)

SFE (Roger. And indeed, during the flight of spacecraft Soyuz 6, I had occasion to do the first welding in space. Today and yesterday, we took part in an experiment on the multi-purpose furnace. One experiment as well as the other are in the area of space metallurgy. I think that this area has a great future. It seems to me that some time will pass, and mankind will have many new metals, many new alloys, with new qualities - we'll be obtaining these materials in conditions which could never be created on the Earth, but which could be available only in space. And it seems to me, that the time will come when space will have whole plants, factories, for the production of new materials and new substances with new qualities, which could be obtained or made only in space.)

MCC-M (Thank you, Valeriy.)

MCC-M The second question from the Soviet Press Center is for Deke Slayton. Deke, do you read?

DMP Yeah, go ahead.

MCC-M Deke, you flew over Europe during the war. How does this continent look to you, from outer space, now? Over.

DMP Well, it's mighty beautiful from up here, I'll tell you that. Unfortunately, we haven't had enough time to look at it - particularly over the continent of Europe. There's been a lot of cloud cover, and we've been very busy. In the next few days, we hope to do more of that. But the little of it we've seen is downright beautiful. I just wish everybody down there could have the opportunity to come up and see it for themselves.

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MCC-H Thank you very much, Deke. The third question from the Soviet press center is for Vance Brand. Vance, for 3 days now, you have not heard any news. What kind of news would you like to hear from us journalists? Over.

CMP Naturally, I'd like to hear good news instead of bad news. For example, it'd be nice to hear that everything is more peaceful in many areas of the world, that the world is truly coming together as right at this moment, as we really believe it is, over a course of several years. We think since the program started that the world has been getting smaller. We would like to see at the same time, good news result from that, in a political and international sense, throughout the world.

MCC-H Thank you, Vance.

MCC-M (The next question to the Soyuz spacecraft commander, Alexey Leonov. Where in your homeland would you like to plant the seeds for the trees which you are supposed to be exchanging?)

SCDR (I was born in Siberia and grew up there. So in my conscience, the most beautiful tree; the most long lasting tree and the most undemanding tree is the fir. And this type of tree constitutes the the major type of tree of our Earth and brings the greatest benefit to the - to all humanity. So probably we should plant the pine and the fir.)

MCC-M (Thank you. The next question to Valeriy Kubasov. You have children; what would you like to wish to them from space, as well as all the children of the world?)

SFE (Well, of course, we would like to wish happiness to all children so that their future would be a good one, so that this — their future would be a peaceful one, so that they would always live with their parents and — in happiness, so that they would never loose their fathers and brothers as occurred during the last war. I would like to wish to all the children who are now alive, who now live on the Earth — the majority of them are school children, now they're on vacation — I would like to wish them a good vacation so that they will gather their strength for the upcoming studies in school. That's the end of the answer.)

MCC-M (Thank you.)

MCC-H The next question is for Tom Stafford. Tom, taking into consideration the existing world problems, in your opinion, are the expenses connected with the space flights justified? Over.

ACDR Understand completely; a question that has been asked many times. Certainly in reviewing the data, we think that - in fact, we know the cost is justified in, number 1, the scientific effort that we have put out; number 2, the great benefits that are going to be derived from this from both countries. In fact the total efforts - the total benefits that'll be derived in the end will far outshadow the costs that have been spent upon it. Over.

MCC-H Roger, Tom. Thank you very much for that one.

MCC-M (And one more question to Alexey Leonov. Could you transmit to Earth a sketch that would depict the meaning, the essence of your - of the joint mission in space of your two spacecrafts.)

SCDR (Well, it's probably quite difficult to do this very quickly right now, but I could transmit this drawing. This drawing was made a long time ago. This image.)

MCC-M (Excellent. Thank you.)

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SCDR (As far as the question, is to say. I have done many of the drawings here. For example, here's Tom Stafford. Does it look like him?)

MCC-M (Very much. Very excellent. Thoughtful.)

SCDR (Now I'll show you a very complete - a very young Stafford. Here he is, younger.)

MCC-M (Excellent; exceptional.)

SCDR (And one other person from Texas. This is our friend Deke Slayton. But the portrait of Vance Brand; I just gave it to him and he is not here. So you see, here's a whole cosmic portrait gallery in space. Thank you very much.)

MCC-M Bo, (garble). Thank you. Go ahead.

MCC-H (Thank you.) The first question is for Tom Stafford. How do you evaluate the operation of the Soyuz crew - -

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SFE (Garble) Thank you. Go ahead. (Thank you.) The first question is for Tom Stafford. How do you evaluate the operation of the Soyuz crew during the first days of the flight?

ACDR Well, my evaluation of the Soviet crew during the first day of the flight has been very good. As you know, these are a lot of long, complicated and very tedious procedures that we've had to go through in these transfers - a lot of interface that's taken a long time to work out. And things have gone very well. Yesterday we ran a little longer than we expected but again, they had a lot of extra food for us to eat and also the calls from the head of the Soviet Union and the President of the United States delayed us a little bit. But, overall the cooperation has been outstanding and their procedures have been wonderful. Over.

CC-M (The second question is to Valeriy Kubasov. What contribution can the experience gained on this flight be made - make into the - into future cooperation in space between the - the Soviet Union and the USSR. In other words, what new things have you learned in the last few days which could be useful in the future to astronauts and cosmonauts?)

(First of all, we found out that we can work together SFE in space and cooperate. If - until this time we had only been preparing for it - training it. Now we have tested it out in practice. Yesterday and today have proved to us that at the time of our meeting in space - during our rendezvous, our docking and now during the time of joint activities - we have had no problems at all. We had complete mutual understanding and everything which we had planned - we accomplished it all. And this is the most important thing. This proved that we can work together; we can cooperate in space. And secondly, we checked out and proved that the docking system works - that it works as it was designed. In other words that the technical ideas that had been - and the technical design and the ideas that had been used have proven themselves. Yesterday this was also proven. Thirdly, of course, we recieved additional flight experience at the same time on - in two spacecraft. This would give us a great deal in terms of training or preparing for future flights.)

CC-H The next question is for Vance Brand. But before we ask that, we ask that Valeriy Kubasov may move a little to his left in Soyuz so we can see him better. The question for Vance is the same as the one that Valeriy answered. How might your experiences on this mission contribute to future cooperation in space between the USSR and the USA? That is, did you learn anything in the last few days that would help future astronauts and cosmonauts?

CMP Well, I think the greatest part of our learning, Bo, has been in our training which preceded this flight and all things considered, I think there's where we learned how to communicate, how to plan our training, plan the various aspects of this flight. Upon getting up here in space, we did run into surprises but only minor suprises as a result to our training. I think I learned a lot - I think of course, that if we had another joint flight someday that I'd find it much easier to approach and if somebody else was on this flight, I'd have a lot of suggestions for him. And I certainly recommend such a thing incidentally.

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CC-H Thank you.

CC-M (The third question to Leonov - Alexey Leonov. How comfortable do you consider the Apollo spacecraft to be and how do you like the American food?)

(Today, I have spent 6 hours aboard the spacecraft Apollo in flight - in space, but before this I had been aboard this spacecraft many times before in training. And as a pilot, as a cosmonaut, I like this spacecraft very much. Its appearance, its maneuverability, its capabilities, but of course the Apollo has proven itself already - that its a reliable spacecraft which makes it possible to accomplish many difficult missions. And even the most difficult mission, which is - involves flying around the moon and even partially a landing mission. Today I saw it - how it looks in spaceflight. I like its capabilities for making observations. There are a sufficiently large number of windows to observe the earth and its equipment. Today, in our flight, I had to do a TV report about space food from onboard the Apollo spacecraft but for technical reasons it didn't come through because there was no communication. But I can say that the food which I selected way back on earth was the same here and I liked it very much. I liked the way it's prepared, its freshness and also with the - in the terms of attention paid by the crew. But once again, I'd like to say that space food is not the same food which is eaten by people on earth, no. But as an old philosopher says,) "The best part of a good dinner is not what you eat but with whom you eat." Today I have dinner together with my very good friends Tom Stafford and Deke Slayton because it was best part of my dinner.

CC-H Thank you very much. (Thank you Alexey.)
CC-H The next question is for Deke Slayton. Now that you have finally made it into space, how do your experiences compare with all the stories the other astronauts have been telling you for years?

DMP Well, I'm afraid I haven't discovered anything new. It's been pretty much the same. We've had the same kind of problems up here that people have complained about since MR3, I guess. Not enough space, and a little congestion to the timeline, difficulty in keeping up with things. It's just the last floor of getting things done up here that you realize that you're down there in 1G. Everything takes a little longer. In some respects, it's easier because weighty things are easier to move around, but on the other hand everything just tends to take off if you let go of it. So - it's been a great experience. I don't think there's any way anybody can express - how beautiful it is up here. I've listened to it for 13 or 14 years now and I still didn't believe it until I got here myself. And I don't think there's any way that any of us can express it properly. And I said earlier I surely wish it was possible for a whole lot more people down there to come on up here because I think it'd make for a lot better world.

CC-H Thank you, Deke.